

# Worksheet 3 Solutions

```
def weird_pow(x, y):
    if x >= y:
        return 1
    else:
        return weird_pow(x+1, y) + weird_pow(x, y-1)
```

```
def rock_fact(n):
    """Return the number of different ways to order the digits in n.
    >>> rock_fact(123) # 123, 132, 213, 231, 321, 312
    6
    >>> rock_fact(4235)
    24
    >>> rock_fact(0)
    1
    >>> rock_fact(9)
    1
    """

    if n==0:
        return 1
    else:
        total, number = 0, n
        while number != 0:
            total += rock_fact(n//10)
            number=number//10
        return total
```